

AD-761 569

AVOIDING COMMUNICATIONS BREAKDOWNS
BETWEEN MILITARY MANAGERS AND CIVILIAN
PROFESSIONALS

James H. Sloan, Jr.

Army War College
Carlisle Barracks, Pennsylvania

28 February 1973

DISTRIBUTED BY:

NTIS

National Technical Information Service
U. S. DEPARTMENT OF COMMERCE
5285 Port Royal Road, Springfield Va. 22151

AD 761 569

Reproduced by
**NATIONAL TECHNICAL
INFORMATION SERVICE**
U S Department of Commerce
Springfield VA 22151

USAWC RESEARCH PAPER

AVOIDING COMMUNICATIONS BREAKDOWNS
BETWEEN MILITARY MANAGERS AND
CIVILIAN PROFESSIONALS

A MONOGRAPH

by

Lieutenant Colonel James H. Sloan, Jr.
Field Artillery

US Army War College
Carlisle Barracks, Pennsylvania
28 February 1973

1

ABSTRACT

AUTHOR: James H. Sloan, Jr. LTC, FA
FORMAT: Monograph
DATE: 28 February 1973 **PAGES:** 22 **CLASSIFICATION:** Unclassified
TITLE: Avoiding Communications Breakdowns between Military Managers and Civilian Professionals

Basically the personal value systems (frames of reference) of US Army officers and civilian professionals are examined. The barriers and gateways to communication between these two groups working in a military research and development (R&D) environment are discussed. The goal is improved communications for military managers with civilian professionals through improved insights into the frame of reference of those two groups. Information was gathered through a literature search, telephone queries, personal experience, and concepts developed in the Interpersonal and Small Group Communications Elective at the US Army War College in the fall of 1972. Military managers will communicate much more effectively if they appreciate the differing frames of reference present in organizations. There are almost four civilian professionals to every military officer in the Army's R&D establishment.

TABLE OF CONTENTS

	Page
ABSTRACT	11
INTRODUCTION	1
Background and Purpose	1
Assumptions	2
Organization and Goal	4
FRAME OF REFERENCE FOR US ARMY OFFICERS	4
FRAME OF REFERENCE FOR CIVILIAN MANAGERS	5
DETAILED COMPARISON OF ARMY OFFICERS AND CIVILIAN MANAGERS .	6
Ethical-Moralistic Orientation	6
Concepts Associated with Goals of Organizations	7
Ideas Associated with People as Individuals	9
Concepts Concerning the Personal Goals of Individuals	11
Concepts Associated with Groups of People	14
Ideas Concerning General Topics	15
CONCLUSION	17
FOOTNOTES	19
SELECTED BIBLIOGRAPHY	21

INTRODUCTION

BACKGROUND AND PURPOSE

The current working population of US Army research and development (R & D) activities is made up of about four civilian professionals for every one military officer.¹ My purpose is to point out some of the barriers to effective communications which can exist in this community and the gateways which can be exploited to overcome such barriers. It is clear that: "To achieve even fair success in communications efforts there must somewhere be a set of common values shared by talker and listener, even though their values are quite disparate in some areas."²

To communicate, of course, means to make common, to share. To be effective then, communication must produce the same mental image or picture at the receiver that was envisioned by the sender. We must realize that since no two people have identical backgrounds or experiences every communication is changed in the very process of communication.

Two forces are continuously acting upon your words. . . . Different backgrounds of experience, and different thinking patterns. Fundamental: you must reflect upon these differences before you communicate, as you communicate, and after you communicate.³

Since a majority of management problems can be attributed to faulty communications,⁴ it is clear that we as military managers must consider the frame of reference of both the sender and receiver. I will examine evidence developed by Tyler on the frame of reference

of military officers in comparison with American managers in terms of its communications implications.⁵

ASSUMPTIONS

Two important assumptions have been made in developing the frames of reference for military managers and civilian professionals. Since I will discuss these value systems in relationship to their communications implications, let us consider the assumptions.

First, I have relied heavily on the works of Dr. George W. England and Major James W. Tyler, US Army, done at the University of Minnesota. Dr. England surveyed the personal value systems of 1,072 American managers selected from Poors 1965 Directory of Corporations, Executives, and Directors and reported his results in the Academy of Management Journal.⁶ Major Tyler, using the methods developed by Dr. England, surveyed a sample of 235 officers and ROTC cadets (34 generals, 82 lieutenant colonels, 73 captains, and 46 cadets) and compared his results with those of Dr. England.⁷ Details of the methodology are contained in those two references, but basically the survey vehicle was a Personal Values Questionnaire (PVQ) developed by Dr. England. Such pencil and paper personality tests are "in vogue" but have been criticized on several counts. They have failed to include "deep" areas of personality.⁸ They have the great advantages of quantification, empiricism, economy, and ease of manufacture, administration, and scoring. However, they have the great disadvantage of being designed for statistical,

rather than individual prediction.⁹ Since my interest in this article is examining person-to-person as well as organizational communications problems, there are definite limitations on the inferences that can be drawn from such statistical results. Granting that situational and individual factors have a great deal more to do with the success of such interpersonal relationships than group norms, I feel that some useful insights can and will be drawn from this examination of frames of reference. I will assume, based on the evidence supplied by Tyler and England, that personal value systems (frames of reference) developed on American managers and on US Army officers by their methods are sufficiently accurate for my purpose.

The second major assumption is that the personal value systems of the civilians involved in US Army R & D activities roughly equate with those determined by Dr. England for American managers. The professional group which I am considering is generally at the senior scientist or middle manager level, and is the source population for many managers; therefore, this assumption appears reasonable. In reviewing Dr. England's results in the light of my own experience (six years in Atomic Energy Commission and US Army R & D activities where civilians and military were interspersed at all levels), I found close agreement with personal observations.

ORGANIZATION AND GOAL

Let us, first, look at the personal value systems of US Army officers as determined by Major Tyler. Then, we will look briefly at Dr. England's determination of frames of reference for American managers. I will use the comparisons made by Major Tyler in his statistical analysis of the two groups and superimpose my own inferences on communications barriers and gateways. The barriers and gateways I will use were developed in an elective course in Interpersonal and Small Group Communications taught by LTC D. M. Malone at the US Army War College in the fall of 1972 and to be reported by LTC W. G. Lawson in the Student Research Program. Our goal is to arrive at some ideas for avoiding communications breakdowns between military managers and civilian professionals working closely together within an organization or on a common project.

FRAME OF REFERENCE FOR US ARMY OFFICERS

Tyler found US Army officers to be "primarily pragmatic in their orientation" with "a strong secondary ethical-moral orientation."¹⁰ This essentially means that the operative values which will probably influence an officer's behavior are those concepts that he perceives as being of high importance and successful. Other concepts which he sees as being of lesser importance but also influencing success will influence his behavior indirectly through perceptual screening, that is, acting as a filter to communications. Those concepts which an officer perceives as being

highly important and right are less likely to influence his behavior directly, but do serve as important criteria for his behavior by influencing perception of activities and evaluation of the behavior of others around him.^{11,12} As we will see later, this can lead to barriers to communication, if not appreciated and compensated for. Tyler summarizes his findings on US Army officers by writing:

In general, officers as a group may be described in terms of their values as competitive in nature striving toward achievement and success as personal goals. They are ambitious, placing a high value on ability and skills, and they tend to relate more strongly to others who exhibit these traits. Within their organization they value efficiency, productivity, and leadership most highly as goals desirable for the organization and attempt to influence these goals with their own abilities, skills, and achievements. In these efforts, they identify strongly with the Army and with themselves, but recognize the importance and significance of the efforts of their superiors and subordinates in achieving success.¹³

FRAME OF REFERENCE FOR CIVILIAN MANAGERS

Dr. England discovered that: "As a total group, managers' primary orientations are pragmatic; that is, when managers view some concept as important they also tend to view it as successful."¹⁴ That is probably not a very amazing result since being a manager indicates some level of success and should predispose managers to place high value on concepts they perceive as successful. He also found a moralistic and ethical secondary orientation.¹⁵

We can see now that from an overall view of the findings of Tyler and England the orientations of US Army officers and civilian managers in terms of group norms are quite similar. As was stated in the opening paragraph of this article, there must be a set of common values if we are to achieve success in communications. It would seem then, that we do have a basis for good communications. Unfortunately, those of us, who have worked in organizations made up of military officers working with, for, or supervising civilian professionals, have experienced enough communications breakdowns that our pragmatic orientation leaves us dissatisfied at this point. I will examine the results of Tyler's more detailed statistical comparison of the value systems of the two groups. Therein may be found some of the reasons for communications difficulties. At the same time as these possible barriers are developed, I will mention the gateways which can be exploited to overcome them.

DETAILED COMPARISON OF ARMY OFFICERS AND CIVILIAN MANAGERS

ETHICAL-MORALISTIC ORIENTATION

Tyler noted that, "the military, as a group, have a much stronger ethical-moralistic secondary orientation than that of the managers."¹⁶ This orientation as we have previously discussed influences perception of activities and evaluation of the behavior of others. From this derives the first and perhaps most drastic barrier to communications which we in the military must beware of:

The tendency to judge, evaluate, approve and disapprove individuals and their communications. To overcome this barrier we must be constantly aware of the complex nature of the communications process. We must emphasize feedback to make sure that the receiver and sender truly "make common" and we must attempt to see communications from the other's point of view.

CONCEPTS ASSOCIATED WITH GOALS OF ORGANIZATIONS

In analyzing the responses of the two groups to those concepts having to do with the goals of organizations, the first significant difference which Tyler reported was in regard to organizational efficiency. He found that: "the officers appear to have internalized the goal to a greater degree than the managers"¹⁷ and "found this goal more related to success in their profession than have the managers."¹⁸ Based on personal observations I relate this strong organizational efficiency goal of the US Army officers to their "mission oriented" philosophy. This tracks well with Tyler's other findings on the value systems of the two groups having to do with organizational goals. He found that: more of the military officers had viewed, high productivity as being related to successful and industry leadership as being of high importance, than civilian managers. Not surprisingly for the American managers, Tyler's analysis showed that profit maximization is of greater behavioral relevance.¹⁹ The officers also viewed profit maximization as being successful, but did not place the importance on that organizational goal that civilian managers did. This shows the

pragmatic outlook of the Army officers even though they had no real experience with profit maximization as an organizational goal. All this adds up to a very definite mission orientation within the military sample and would, based on my experiences, reflect itself in an impatience with anything seen as a hindrance to mission accomplishment. It also frequently results in a "traditional" or "carrot-stick" approach to management by military officers and has several communication implications. (Other writers have also noted these tendencies. See, for instance, Hollister and Hurysh²⁰ or Muelier.²¹)

Probably the most obvious of the communications barriers present where the "traditional" or, as some would say, conservative management processes are followed is the overreliance on formal organizational communications channels. There is an assumption that these formal channels are open and are the most efficient means of communication. An example of the danger of this attitude can be found in Studies in Organizational Effectiveness edited by Raymond V. Bowers.²² In sampling the opinions of civilian members of an Air Force R & D organization, Professor Bowers found that over one-quarter of the group interviewed felt that "Appreciation by Higher-Ups" or, in this case, lack of appreciation was a hindrance to effectiveness. A typical comment was:

A military man in an office will feel that it's his duty to make a report to his superior. He will take information from the person who had done the work--in this case the work for which I am responsible--and even though he doesn't

know anything about the content of this information, he still feels that it's his job rather than mine to bring it to his superior. In effect, he does not trust me in the area of my own responsibility when it comes to reporting to another military man.²³

Now that comment to me is most illuminating. I have been both guilty of that type of behavior and victimized by it in R & D activities. Normally we rationalize such behavior by telling ourselves that military communicate better with military and civilian with civilian, but we must put on the other fellow's skin and assume his perspective, if we are to improve communications. To overcome this barrier we must flatten the organizational hierarchy, increase feedback, and above all act as expeditors for communication, not blocks, by encouraging personal contact between military and civilian professionals at every level. Professional jealousy, parochialism, and self-aggrandizement will quickly kill the opportunity for effective communications within any organization.

IDEAS ASSOCIATED WITH PEOPLE AS INDIVIDUALS

When Tyler examined the responses of the two groups with respect to those ideas associated with people as individuals, he discovered some rather significant differences. The particular concepts of most significance from a communications standpoint, which we will examine, were cooperation and loyalty, obedience, honor, and conformity. I found myself in disagreement with some of Tyler's interpretations of the reasons for the differences and will propose my own interpretations, so labeled, in discussing the communications implications of these differing values.

Tyler found that; whereas, the civilian managers placed higher importance on cooperation than the military officers, the military placed somewhat more importance on loyalty.²⁴ He saw this as influencing the civilian manager to assess another person based on his ability to cooperate and get along with others, while the military officer would apply a criterion of loyalty in making his judgment.²⁵ Based on personal observation, I feel he has understated the importance of the concept of loyalty to most military personnel. From the outset of their military association, all ranks are taught loyalty to superiors, subordinates, and peers (the "buddy-system") as well as the always overriding concept of loyalty to country. The idea is highly internalized in almost every military officer and will definitely influence perceptual screening and act as a strong communications filter. Even a hint of perceived disloyalty in a communication can block out the remainder of the message. The responses reported by Tyler and England indicate to me that where civilians see cooperation and loyalty as being practically synonymous, the military officer views the concepts entirely differently with loyalty actually being, in effect, an "emotion-laden word" for that group. We in the military must be aware of this difference in attitude because it does lead to early evaluation of message and sender rather than total message comprehension in many instances.

Another concept which both groups view as having high importance is honor.²⁶ There is a slight difference in degree with the military

group giving more responses in the high importance category. I do not see any communications relevance here other than that previously noted for the ethical-moralistic frame of reference which the military responses indicate to a greater degree than the civilian managers.

Tyler reports differences between the two groups with regard to the concepts of conformity and obedience, with the military officers viewing both as being more related to success than do the civilian managers.²⁷ He found both of these concepts to have relatively low behavioral relevance. I found the responses interesting from a communications standpoint because the attitudes evidenced by the military responses lead to several communications barriers. There is a danger of early evaluation based on appearance (clothes, haircut, shave, etc.) and perception (grouping, closure, background, etc.) of which we in the military must be cognizant. We must avoid stereotyping ourselves and the civilians with whom we work.

CONCEPTS CONCERNING THE PERSONAL GOALS OF INDIVIDUALS

In analyzing their responses on concepts concerning the personal goals of individuals, Tyler found military officers placed significantly more importance on prestige, influence, power, and security; while civilian managers viewed creativity, job satisfaction, and money as being more important in achieving success.²⁸ Although the values associated with the norms of the groups surveyed by England and Tyler are instructive, I feel that the concepts

related to personal goals may vary significantly for the groups in which I am interested. In particular, I have observed that for the civilian professionals associated with R & D activities at all levels, money may not be as important as indicated for American managers as a group. Creativity and job satisfaction may be even more important. Creativity is the very reason for R & D professionals to exist and therefore must have high behavioral relevance for them. The only communications difficulty that I have observed which can be attributed to this strong creativity value is the desire of the civilian scientist to research something which is long range and intellectually stimulating, but unrelated to the problems of immediate importance. This comes into conflict with the strong pragmatism of the military officer's value system and results in a communications breakdown. This can be avoided or overcome by dealing with each man as an individual and understanding his frame of reference.

Job satisfaction we can all agree is a crucial area in determining whether any organization will operate near maximum effectiveness. Tyler states that: "Managers seek to achieve job satisfaction as a personal goal more than do military officers, and perceive the achievement of job satisfaction as contributing to personal success." and "The military, on the other hand, indicate that job satisfaction is a moral right of the individual, but doesn't contribute significantly to his personal success."²⁹ He then attributes this difference in values basically to the fact, that

civilian managers generally are channelized into types of work, even though locale and management level may vary, while military officers not only move frequently, but also progress through a highly varied work career. This means that the military officer will strive for job satisfaction, but failing to achieve it, he knows that he can look forward to a change, after not too long a period, to perhaps more satisfying work.³⁰ I believe that his analysis is valid and leads to some interesting communications "hang-ups" in military R & D organizations. Bowers reported some of the attitude difficulties having to do with civilian-military relations in an Air Force R & D activity. The area of major conflict was the question of authority, particularly should military bosses be rotated through, while civilians provided the continuity for the organization.³¹ This corresponds to the situation currently in most of the Army's R & D activities with a military Commander or Director and a civilian Chief Scientist, Director, or Deputy Director. This, of course, relates back to the previously noted difficulty of military reporting to military and civilian to civilian. I have been in the other type of R & D activity where military officers were rotated into the organization as scientists or middle managers while civilians were the top managers. The communications problems are essentially identical. Each group feels that the other has too much influence and authority and that the group of which they are members has little chance of advancement or contribution. Such attitudes are self-defeating since they result in poor communications,

poor overall organization performance, and therefore limited job satisfaction and advancement. In effect, the worse fears of both groups are realized.

The personal goals of prestige, power, and influence are found to be more desirable for the US Army officer sample, but Tyler doubted that these would have noticeable influence on their behavior. Both groups found the concept of security to be pleasant with the military relating security more with success, but again at a level indicating little behavioral significance.³² I see no significant communications problems arising from the slight differences of the responses to these ideas.

CONCEPTS ASSOCIATED WITH GROUPS OF PEOPLE

In his analysis of the responses to those concepts associated with groups of people, Tyler questioned the validity of the responses received from the military sample.³³ The concepts included were: Managers, Me, My Company, Customers, My Subordinates, Technical, Employees, Employers, White Collar Workers, My Co-Workers, Owners, Laborers, and Stockholders. Tyler properly questions response validity because of the ambiguous interpretation likely placed on several of these concepts by the military respondents. His discussion of the various interpretations of the differences between American managers and US Army officers on these concepts having to do with groups of people is interesting, but I will attempt no inferences of the communications significance of these questionable results.

IDEAS CONCERNING GENERAL TOPICS

It is in the area of those concepts of ideas associated with general topics that some of the most significant differences between the responses of the two groups were found. These differences of frame of reference on such topics as: competition, rational, authority, force, change, risk, equality, and emotions, can have important effects on communications within an organization. Let us look at them in some detail. First, Tyler discovered both groups to be highly competitive, but the military looked upon competition more as a means to be successful than the civilians.³⁴ The military are more likely to encourage competition between elements of an organization as a means of achieving organizational goals. We have all seen this technique employed frequently and quite effectively in all types of military organizations. However, this competition between elements can be overemphasized and create an atmosphere of distrust which will destroy horizontal communications. Military managers should be aware of this pitfall and establish goals which are oriented to the total organization. Excellence of individuals or subordinate elements can be recognized publicly to encourage element as well as total organization esprit.

The responses of civilian managers indicate that they are more willing to take risk and innovate change. The military group placed higher value on rational and cautious action. Tyler properly explains these differences in terms of decision costs.³⁵ The military evaluates risk-taking in a combat situation where the costs

are lives. The civilian sees the need to be creative and take risks in order to get larger return on investments. In R & D organizations, the military managers frequently see their responsibility to be evaluation in terms of practicality and utility of output. If overdone, this can be stifling of new ideas and cause a breakdown of communications with the civilian professional. Put bluntly, bureaucracy can inhibit communication. We in the military must avoid any tendency in our organizations to become bureaucratic and fear the change or risk associated with new ideas--thorough, open-minded, evaluation is the key.

The ideas of authority, force, and conflict are, not surprisingly, viewed as more important by the military.³⁶ The communications disaster inevitable if we ride roughshod over subordinates and civilian associates certainly does not require amplification. Perhaps a more interesting finding was that the military view equality as a moral and ethical right more than do civilian managers. The military also placed a higher value on liberalism.³⁷ The communications possibilities of exploiting these definite frame of reference pluses is obvious.


One final area of possible communications breakdown in the general topics category is the very low role which emotions play in influencing the behavior of both these groups. The military appear to be even less influenced behaviorally by emotions than civilian managers.³⁸ Since emotions play a very real role in the communications process by influencing interpretations made by both sender and receiver, it is frequently desirable to get emotions

cut in the open. The personal risk is greater; but the advantages of demonstrating personal involvement and reducing ambiguity are worth it.

CONCLUSION

If American business has a new motto, it would appear to be "communicate or founder."³⁹ The military is certainly aware of that truism. I have concentrated on R & D activities in this discussion, but hopefully some of the implications have value for other types of organizations. There are two barriers to communication which I feel are so prevalent in organizational and individual communication that I must emphasize them here. The first, and most pervasive, is a failure on the part of communicators to listen. It is essential that we all develop our listening skills to be effective communicators. The second is of particular importance to military professionals. It was mentioned earlier in the article but bears repetition. Parochialism can be a barrier to communication. In aspiring to the highest levels of professionalism, we must not lose our ability to appreciate other than military viewpoints. That is the constant theme which runs through this field of interpersonal communications: "appreciate the other person's point of view." I have stressed it in almost all of the gateways proposed to overcome or circumvent communications barriers. Even if someone receives your message accurately, his mind will edit it in a different way

than yours.⁴⁰ You must try to know his frame of reference in order to communicate effectively.


JAMES H. SLOAN, JR.
LTC FA

FOOTNOTES

1. Telephone conversation with Mr. Austin Duncan, Office of the Chief of Research and Development, Department of the Army, the Pentagon, 21 February 1973.
2. Roy G. Foltz, "Communications: Not an Art, a Necessity," Personnel, May 1972, pp. 60-64.
3. Charles E. Irvin, "Back to Fundamentals in Communications," Burroughs Clearing House, January 1971, pp. 28, 59-61.
4. Personnel, p. 63.
5. James Wm. Tyler, MAJ, A Study of the Personal Value Systems of US Army Officers and a Comparison with American Managers, pp. 1-68.
6. George W. England, "Personal Value Systems of American Managers," Academy of Management Journal, March 1967, pp. 53-68.
7. Tyler, pp. 1-9.
8. Harold J. Leavitt, Managerial Psychology, p. 90.
9. Ibid.
10. Tyler, p. 10.
11. Academy of Management Journal, pp. 54-55.
12. Tyler, pp. 11-13.
13. Ibid., pp. 34-35.
14. Academy of Management Journal, p. 58.
15. Ibid., p. 59.
16. Tyler, p. 37.
17. Ibid., p. 42.
18. Ibid.
19. Ibid., p. 43.
20. William G. Hollister and Thomas G. Hurysh, "Missing Link in Communication," Personnel Journal, June 1971, pp. 466-472, 497.

21. Robert K. Mueller, "The Managerial Gap: Traditionalists vs. 'Scientists'," Personnel, November-December 1969, pp. 8-21.

22. Raymond V. Bowers, et al., Studies in Organizational Effectiveness, pp. 127-138.

23. Ibid., p. 130.

24. Tyler, p. 48.

25. Ibid., p. 49.

26. Ibid.

27. Ibid., pp. 49-50.

28. Ibid., p. 53.

29. Ibid., p. 55.

30. Ibid.

31. Bowers, pp. 142-152.

32. Tyler, p. 57.

33. Ibid., pp. 60-61.

34. Ibid., p. 66.

35. Ibid.

36. Ibid., p. 67.

37. Ibid.

38. Ibid., p. 68.

39. Personnel, p. 15.

40. Burroughs Clearing House, p. 60.

SELECTED BIBLIOGRAPHY

1. Bowers, Raymond V., ed. Studies in Organizational Effectiveness. Washington: Air Force Office of Scientific Research, 1962. (UB153 B6)
2. Bowers, Raymond V., ed. Studies on Behavior in Organizations. Athens: University of Georgia Press, 1966. (HD38 R4)
3. Duncan, Austin, DA Office of the Chief of Research and Development. Telephone Conversation. Pentagon: 21 February 1973.

(Mr. Duncan was able, through records maintained in his office, to furnish data on the relative manning levels of military officers and civilian professionals in Army R & D activities.)
4. England, George W. "Personal Value Systems of American Managers." Academy of Management Journal, Vol. 10, March 1967. pp. 53-68.
5. Foltz, Roy G. "Communication: Not an Art, a Necessity." Personnel. Vol. 49. May-June 1972. pp. 60-64.
6. Hollister, William G. and Hurysz, Thomas G. "Missing Link in Communication." Personnel Journal. June 1971. pp. 466-472, 497.
7. Irvin, Charles E. "Back to Fundamentals in Communications." Burroughs Clearing House, January 1971. pp. 28, 59-61.
8. Leavitt, Harold J. Managerial Psychology. Chicago: The University of Chicago Press, 1972.
9. Merrill, Grayson. Managing a Defense Company for Growth and Profit. New York: Exposition Press, 1972. (HD31 M38)

(Contains chapters on communicating and motivating which included interesting insights into attitudes of government and non-government R & D workers.)
10. Mueller, Robert K. "The Managerial Gap: Traditionalists vs. 'Scientists'." Personnel. Vol 46. November-December 1969. pp. 8-21.
11. Tyler, James Wm. A Study of the Personnel Value Systems of U.S. Army Officers and a Comparison with American Managers. Thesis. Minneapolis: University of Minnesota, August 1969.

(Basic reference used to establish frame of reference of Army officers. Contains a statistical analysis of the differences of Army officer responses from those of American managers on Dr. England's Personal Values Questionnaire.)